



GaitBetter

Promoting Healthy Aging

**Digital Therapeutics (TDx), motor-cognitive intervention,
prevention and early detection of neurodegenerative
diseases.**

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MOTOR-COGNITIVE TRAINING > MOTOR TRAINING + COGNITIVE TRAINING

Walking & Cognition

TREATING MIND OVER MATTER.

Walking is not just a motor function. It is not spontaneous like breathing or heartbeat.

Walking involves sensory and cognitive processing that depends on the environment and context in which it taking place.



GAITBETTER SOLUTION

A Smarter Step **Forward**

GaitBetter provides **motor-cognitive** training and diagnosis solution by adding semi-immersive **virtual reality** to any treadmill.



TREADMILL-AGNOSTIC
HARDWARE



AI BASED PERSONALIZED
SOFTWARE

Promoting Healthy Longevity

Gait Rehabilitation

Fall Prevention

Neurodegenerative (AD/PD) diseases prediction



Click picture to launch demo

SCIENTIFIC VALIDATION

Standing on Solid Ground

Through clinical trials, real-world usage, and academic research, GaitBetter has proven its cognitive-first methodology.

\$8M+ *academic research budget*

18 *peer-reviewed publications*

50% *And as high as 80% decrease in number of falls in the 6 months after training, compared to 6 months before training.*

2x *better than treadmill-only training*

Scientific Advisory Board



Prof. Anat Mirelman
Director of LEMON TASM



Prof. Nir Giladi
Director of Neurology Division -
TASM



Prof. Jeff Hausdorff
Director of the CMCM Center -
TASM

THE LANCET

The most comprehensive RCT conducted in VR for rehabilitation, published in The Lancet.

Addition of a non-immersive virtual reality component to treadmill training to reduce fall risk in older adults (V-TIME): a randomised controlled trial



Anat Mirelman, Lynn Rochester, Inbal Maidan, Silvia Del Din, Lisa Alcock, Freek Nieuwhof, Marcel Olde Rikkert, Bastiaan R Bloem, Elisa Pelosin, Laura Avanzino, Giovanni Abbruzzese, Kim Dockx, Esther Bekkers, Nir Giladi, Alice Nieuwboer, Jeffrey M Hausdorff

Summary

Background Age-associated motor and cognitive deficits increase the risk of falls, a major cause of morbidity and mortality. Because of the significant ramifications of falls, many interventions have been proposed, but few have aimed to prevent falls via an integrated approach targeting both motor and cognitive function. We aimed to test the hypothesis that an intervention combining treadmill training with non-immersive virtual reality (VR) to target both cognitive aspects of safe ambulation and mobility would lead to fewer falls than would treadmill training alone.

Methods We carried out this randomised controlled trial at five clinical centres across five countries (Belgium, Israel, Italy, the Netherlands, and the UK). Adults aged 60–90 years with a high risk of falls based on a history of two or more falls in the 6 months before the study and with varied motor and cognitive deficits were randomly assigned by use of computer-based allocation to receive 6 weeks of either treadmill training plus VR or treadmill training alone. Randomisation was stratified by subgroups of patients (those with a history of idiopathic falls, those with mild cognitive impairment, and those with Parkinson's disease) and sex, with stratification per clinical site. Group allocation was done by a third party not involved in onsite study procedures. Both groups aimed to train three times per week for 6 weeks, with each session lasting about 45 min and structured training progression individualised to the participant's level of performance. The VR system consisted of a motion-capture camera and a computer-generated simulation projected on to a large screen, which was specifically designed to reduce fall risk in older adults by including real-life challenges such as obstacles, multiple pathways, and distracters that required continual adjustment of steps. The primary outcome was the incident rate of falls during the 6 months after the end of training, which was

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Work in Progress



SPAULDING™
REHABILITATION NETWORK

sub-acute and chronic
Stroke rehabilitation



**KU MEDICAL
CENTER**
The University of Kansas

mild traumatic brain
Injury rehabilitation

TRACTION

A Proven Solution

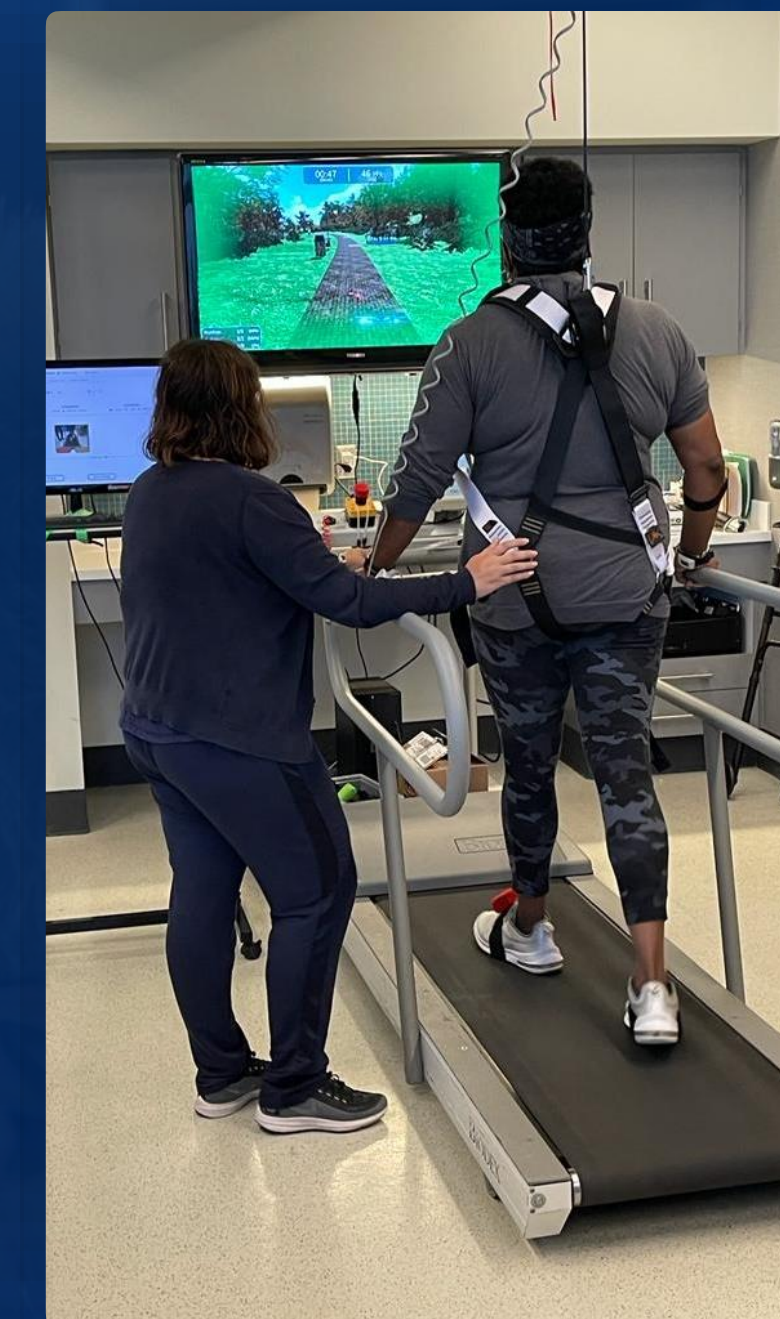
GaitBetter is available in the USA and Israel

60+ Systems installed

+70% Reduction in falls rate

4,000+ Trainees reduced their falls risk after using GaitBetter

usa First systems installed in Spaulding (MA), LifeSpan (RI), Langone (NY), the VA (MD) and others



U.S. Department of Veterans Affairs
Veterans Health Administration
Geriatric Research, Education, and Clinical Centers



The BIRD Project

Spaulding Rehabilitation Hospital & GaitBetter

- **Project goals:**

- Extending GaitBetter's clinical evidence (stroke rehabilitation)
- Adjust GaitBetter to fit the USA healthcare workflows and standards.

- **Spaulding:**

- Ranked as the #3 Best Rehabilitation Hospital in 2019/2020. At the top 5 since 1995.
- Recognized leader in rehabilitative medicine nationally and internationally.
- 4 Inpatient Hospitals, more than 20 outpatient.



SPAULDINGTM
REHABILITATION NETWORK



The BIRD Project

Spaulding Rehabilitation Hospital & GaitBetter

- **Challenges:**

- Cultural differences
- International project during COVID

- **Benefits:**

- References: first customer in the USA due to Spaulding relationship and brand name
- US Publications



Thank You!

And remember:

Use your head to keep moving forward!

GaitBetter

Saving Lives Through Smarter Mobility Training

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